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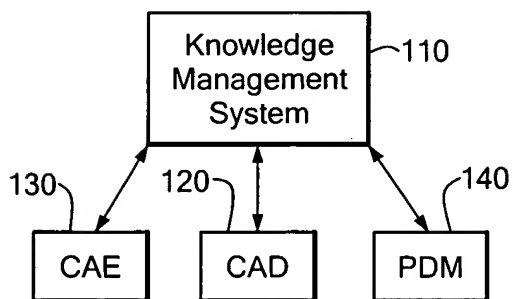


FIG. 1

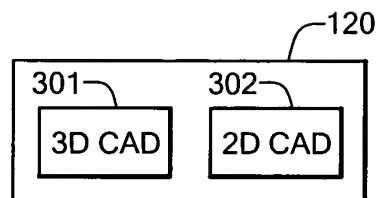


FIG. 3A

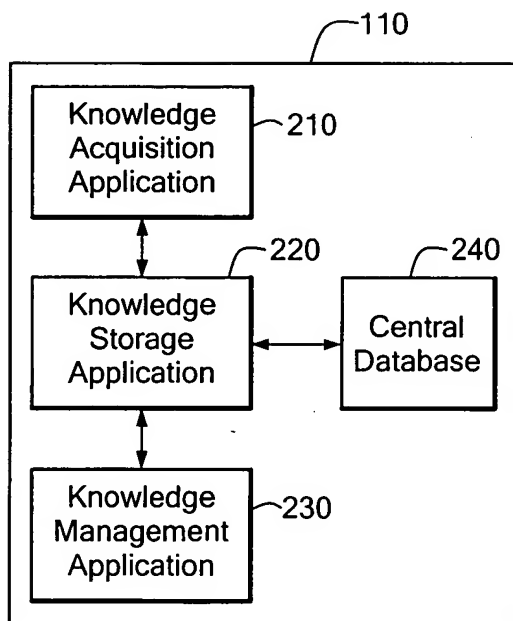


FIG. 2

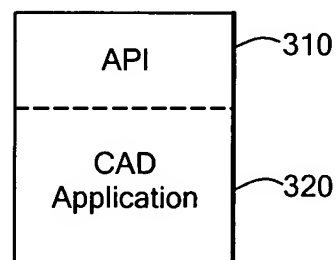
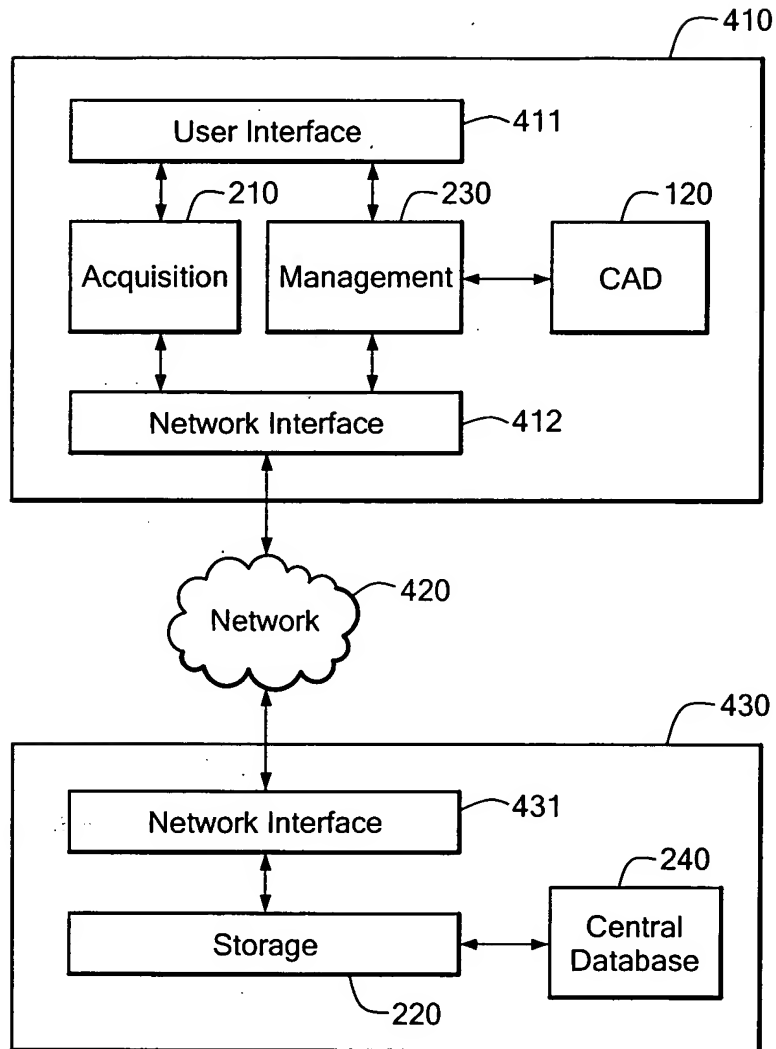


FIG. 3B

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400

FIG. 4

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FIG. 5

RuleStream nAct Expert
File Edit View Help

Part Family - Tree
BuildingServicesFan
 FanAssembly
 Rotor
 HousingAssembly
 Housing
 MotorAssembly
 Motor
 MountingAssembly
 Mounting

510

Application Fan Design

BuildingServicesFan: MountingAssembly

Display Name *
Mounting Assembly

System Name *
MountingAssembly

Subpart Type *
Static

Category *
General

Valid Part Families *
Mounting

531

Subscribed to

Description

Knowledge Source

Status
In Development

Last Updated
NAVION\jdrake 7/22/2002 11:45:02 AM

Context
BuildingServicesFan

Optimal Part Family *
User Edit Follow Part Number
result = "Mounting"
532

Quantity

Exists When *

Part Names *

When Changed *

Documentation
* Required

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600

630

610

620

631

633

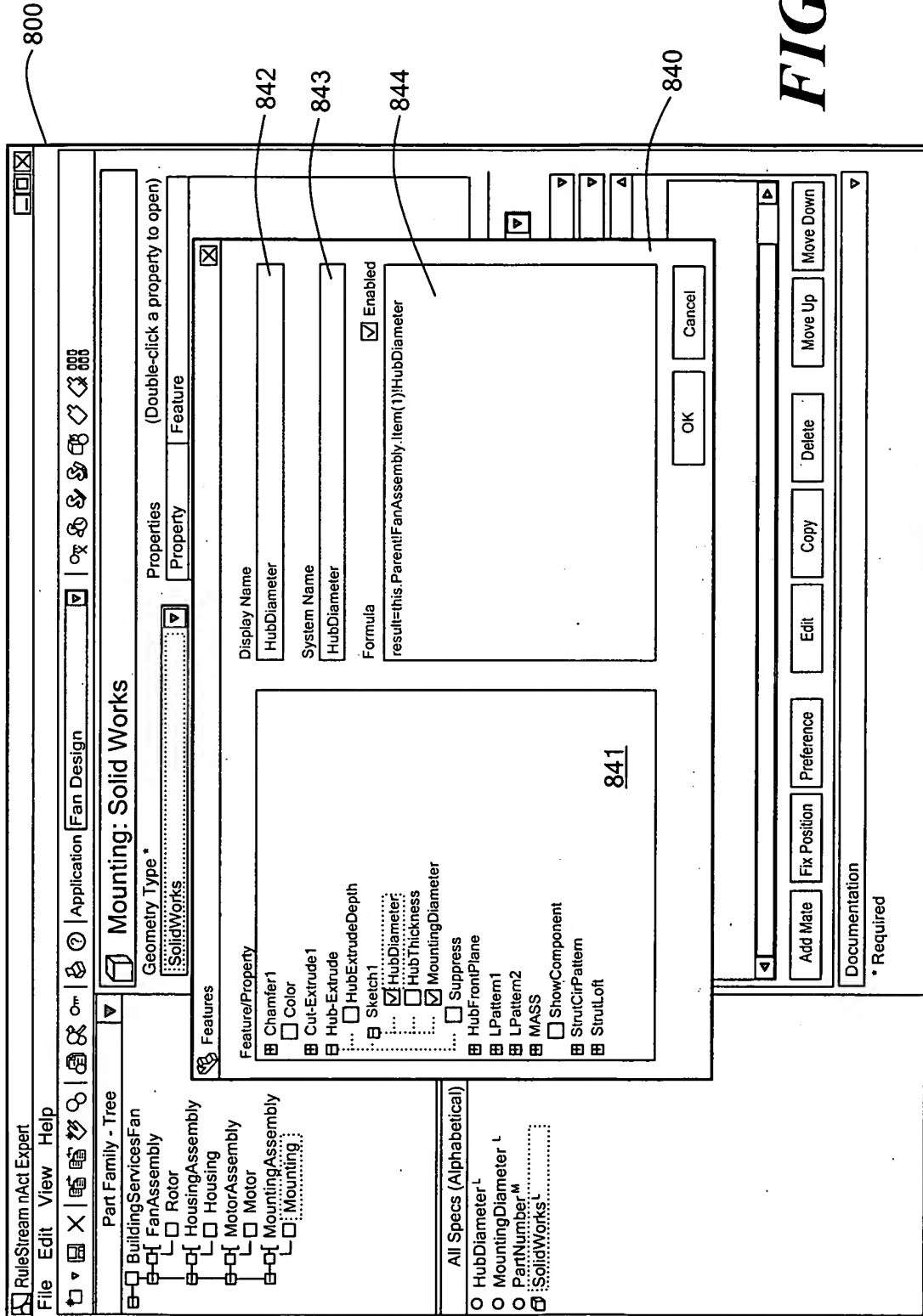
FIG. 6

The screenshot displays the RuleStream nAct Expert software interface. At the top is a menu bar with 'File', 'Edit', 'View', and 'Help'. Below the menu bar is a toolbar with various icons. The main window is divided into several panes. On the left is a 'Part Family - Tree' pane showing a hierarchical list of components: 'BuildingServicesFan', 'FanAssembly', 'Rotor', 'HousingAssembly', 'Housing', 'MotorAssembly', 'Motor', and 'MountingAssembly'. The 'MountingAssembly' component is selected. To the right of the tree is a 'Properties' pane for the selected component. It contains a 'Geometry Type' dropdown set to 'SolidWorks', a 'Valid Part Files' list with '632' and a 'Pattern' checkbox, and a 'Subscribed To' field. Below these are fields for 'Status', 'In Development', and 'Last Updated' (NAVION\gsmith 3/17/2003 2:33:47 PM). On the far right is a 'Context' pane with a dropdown set to 'Mounting'. Below this are fields for 'Optimal Part File', 'Component Name', and 'Orientation'. At the bottom right is a 'Documentation' pane with buttons for 'Add Mate', 'Fix Position', 'Preference', 'Edit', 'Copy', 'Delete', 'Move Up', and 'Move Down'. A 'Required' checkbox is also present.



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FIG. 8



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FIG. 9

900

950

931

930

910

920

RuleStream nAct Expert
File Edit View Help

Part Family - Tree

- BuildingServicesFan
 - FanAssembly
 - Rotor
 - HousingAssembly
 - Housing
 - MotorAssembly
 - Motor
 - MountingAssembly
 - Mounting

Application: Fan Design

Mounting: Solid Works

Geometry Type *
SolidWorks

Valid Part Files *
Mounting-Aero.SLDPRT

Properties (Double-click a property to open)

Property	Feature
HubDiameter	Hub-Extrude.Sketch1.HubDiameter
MountingDiameter	Hub-Extrude.Sketch1.MountingDiameter

Subscribed To

Status
In Development

Last Updated
NAVION\gsmith 3/17/2003 2:33:47 PM

Context
Mounting

Optimal Part File

Component Name

Orientation

User Edit

Add Mate Fix Position Preference Edit Copy Delete Move Up Move Down

Documentation
* Required

All Specs (Alphabetical)

- HubDiameter^L
- MountingDiameter^L
- PartNumber^M
- SolidWorks^L

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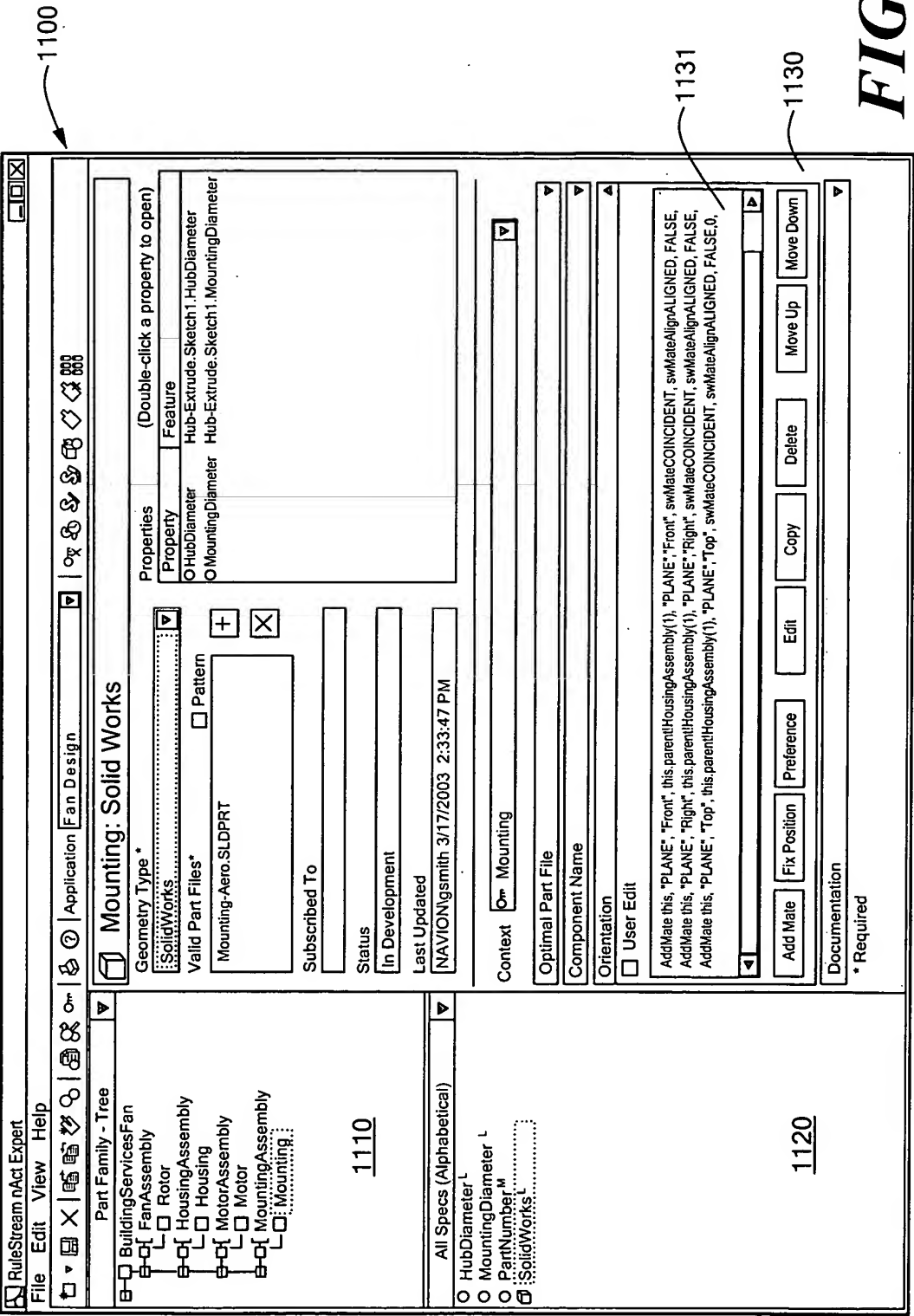


FIG. 11

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RuleStream nAct Expert
File Edit View Help

Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting

1210

1200

BuildingServicesFan: FanArea

Display Name *
Fan Area

System Name *
FanArea

Property Type *
Formula Driven

Data Type *
Double

Units
m^2(metres^2)

Category *
Requirements

Subscribed to

Description

Knowledge Source

Status
Released

Last Updated
GROGAN\bgrogan 8/22/2002 10:53:22 AM

Context
BuildingServicesFan

Formula
☐ Auto Revert ☐ Follow Part Number

If this\FanDiameter > 0 Then
result = 3.141 * (this\FanDiameter / 2)^2
Else
result = 0
Else

User Interface

Valid Values

When Changed

Database Constraint

Documentation

* Required

1220

All Specs (Alphabetical)

- Density^L
- FanArea^L
- FanAssembly^L
- FanDiameter^L
- FanPressure^L
- FrequentStartStop^L
- HousingAssembly^L
- MotorAssembly^L
- MountingAssembly^L
- PartNumber^M
- SolidWorks^L
- SpecifiedSpeed^L
- SquareFlange^L
- VolumeFlowRate^L

FIG. 12

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1300

1340

1330

1310

1320

FIG. 13

RuleStream nAct Expert

File Edit View Help

Part Family - Tree

- BuildingServicesFan
- FanAssembly
 - Rotor
 - HousingAssembly
 - Housing
 - MotorAssembly
 - Motor
 - MountingAssembly
 - Mounting

Application Fan Design

BuildingServicesFan: FanArea

Display Name *
Building Services Fan

System Name *
BuildingServicesFan

Application *
Fan Design

Category

Description
This part family contains the fundamental product knowledge for designing axial flow, building ventilation fans. As the name implies, the direction of flow through an axial fan is parallel to the axis of rotation.

Subscribed To (Double-click to view subscriptions)

Knowledge Source
Fan Design, Howden Buffalo

Status
In Development

Where Used

Image Filename
BuildingServiceFan.bmp

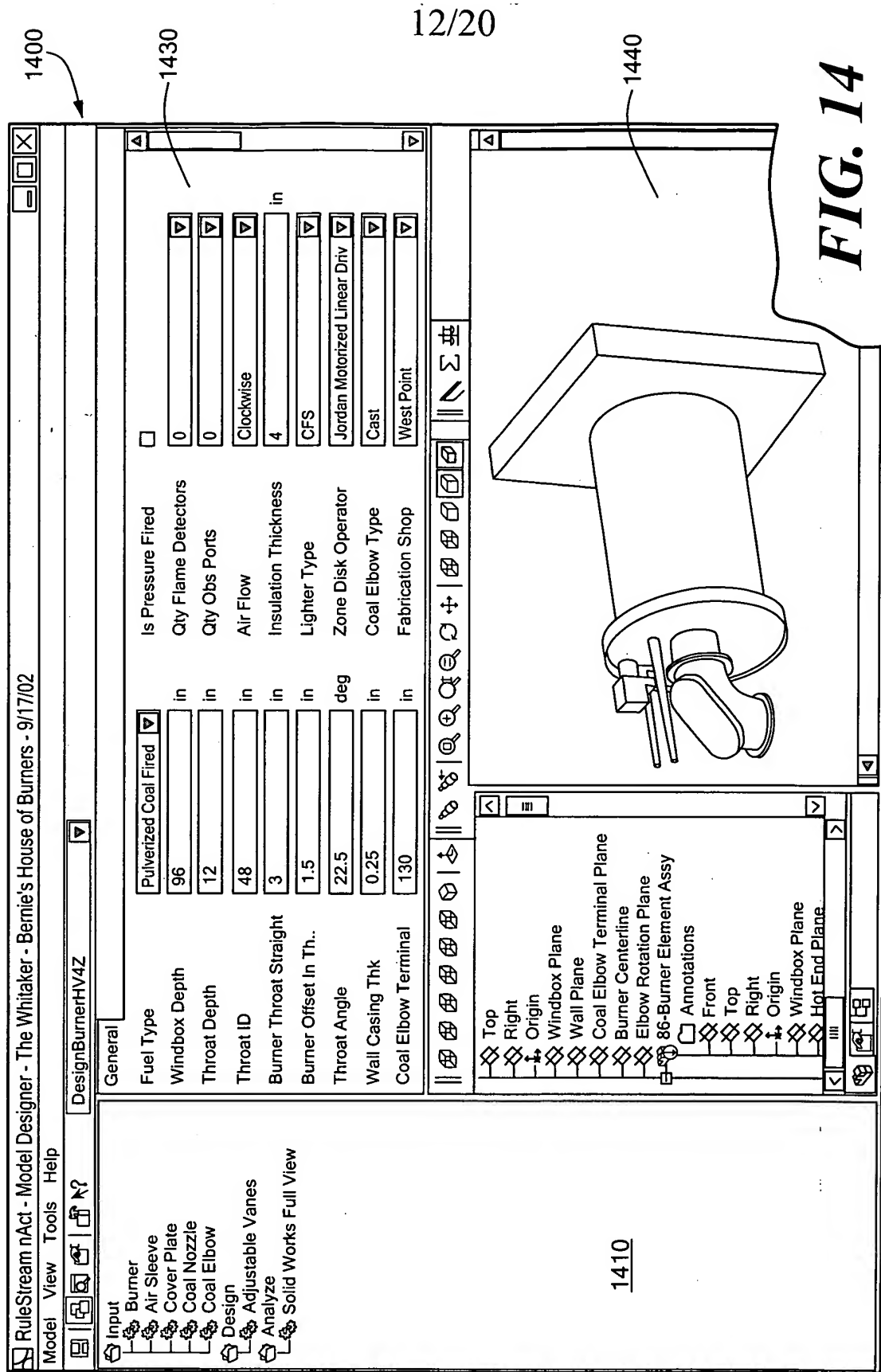
Documentation (Double-click to open)
Corporate Fan Design Best Practices.doc

Last Updated
GROGANbgrogan 10/10/2002 2:21:30 PM

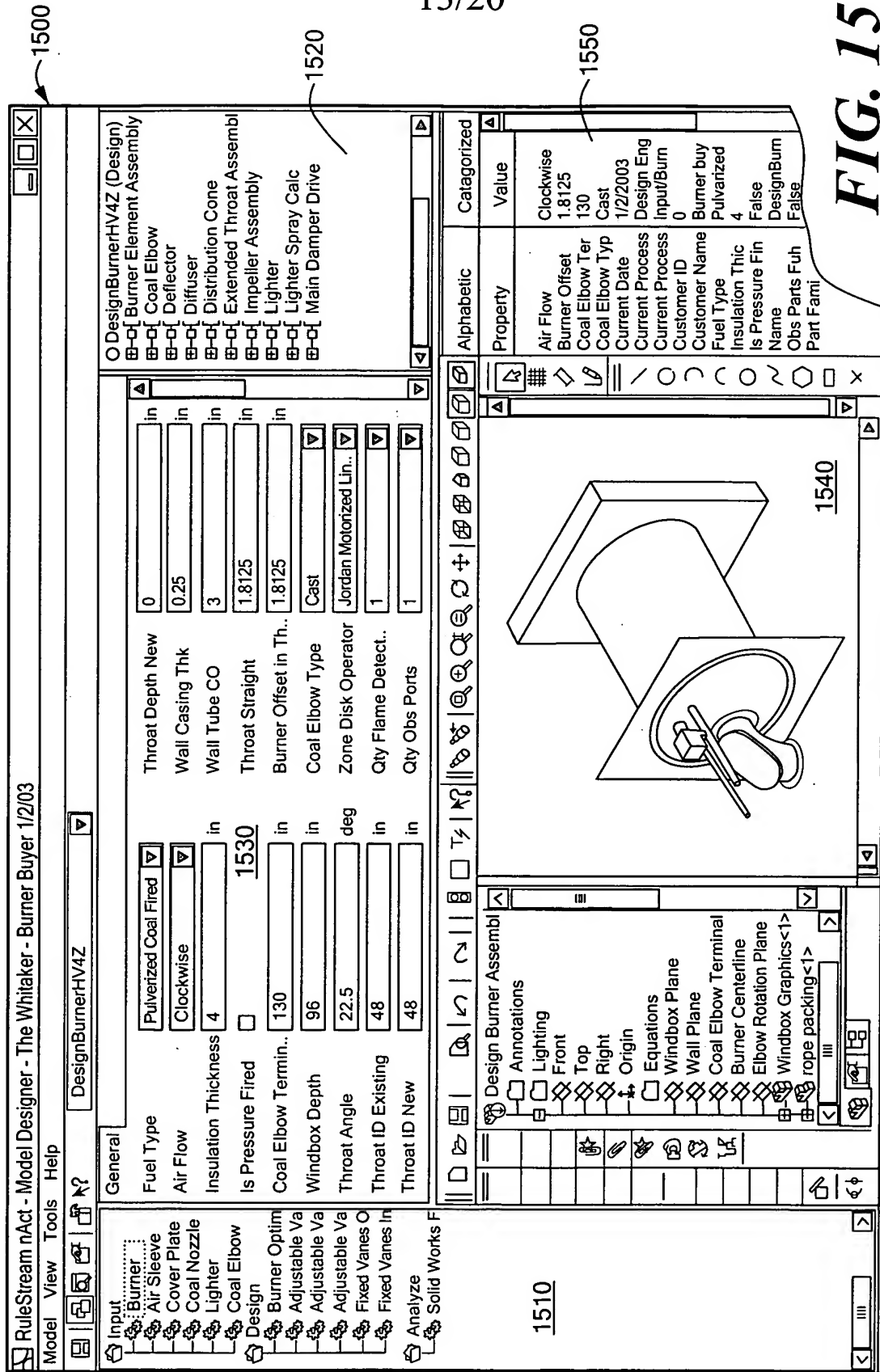
All Specs (Alphabetical)

- Density^L
- FanArea^L
- FanAssembly^L
- FanDiameter^L
- FanPressure^L
- FrequentStartStop^L
- HousingAssembly^L
- MotorAssembly^L
- MountingAssembly^L
- PartNumber^M
- SolidWorks^L
- SpecifiedSpeed^L
- SquareFlange^L
- VolumeFlowRate^L

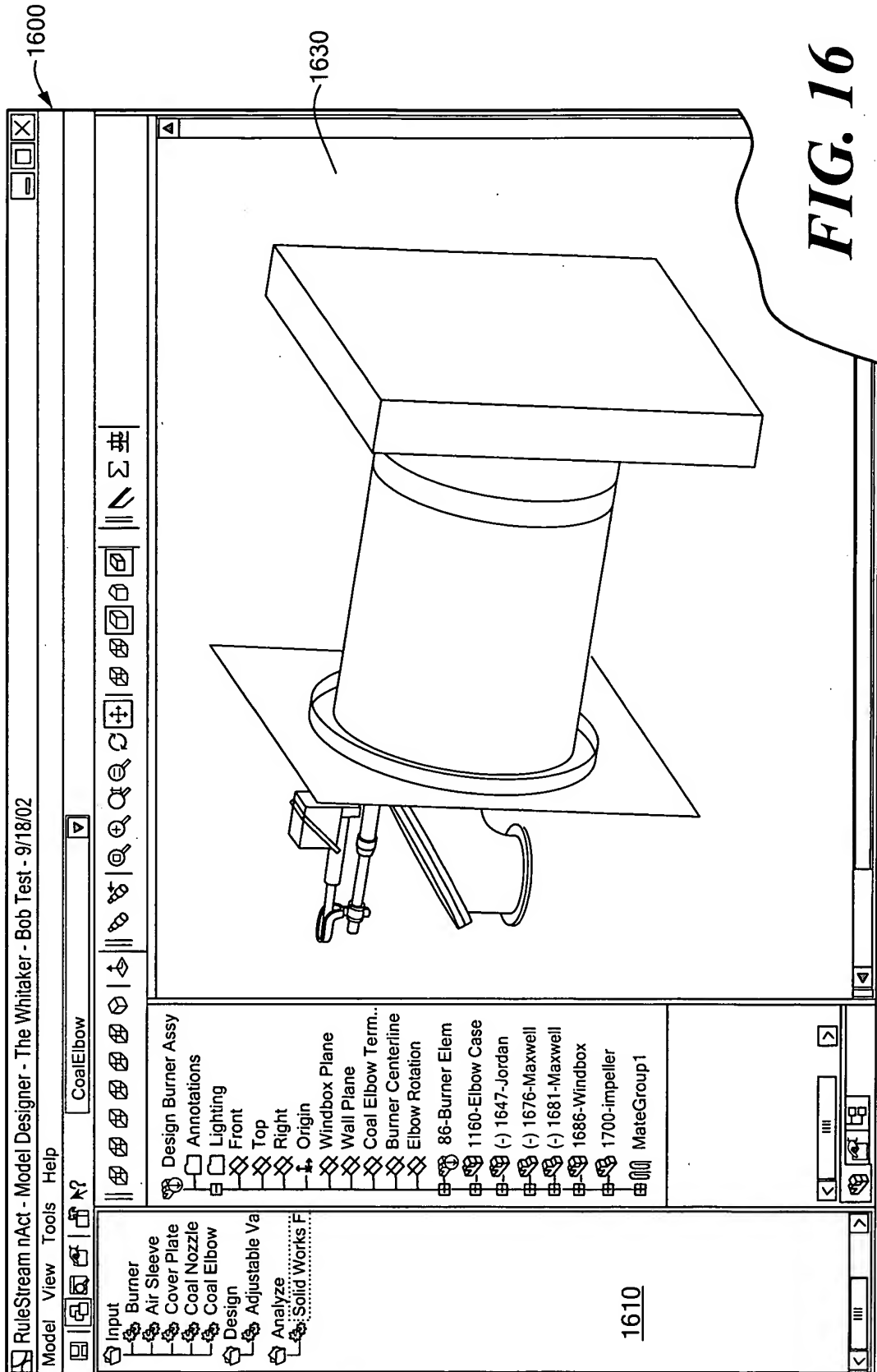
* Required



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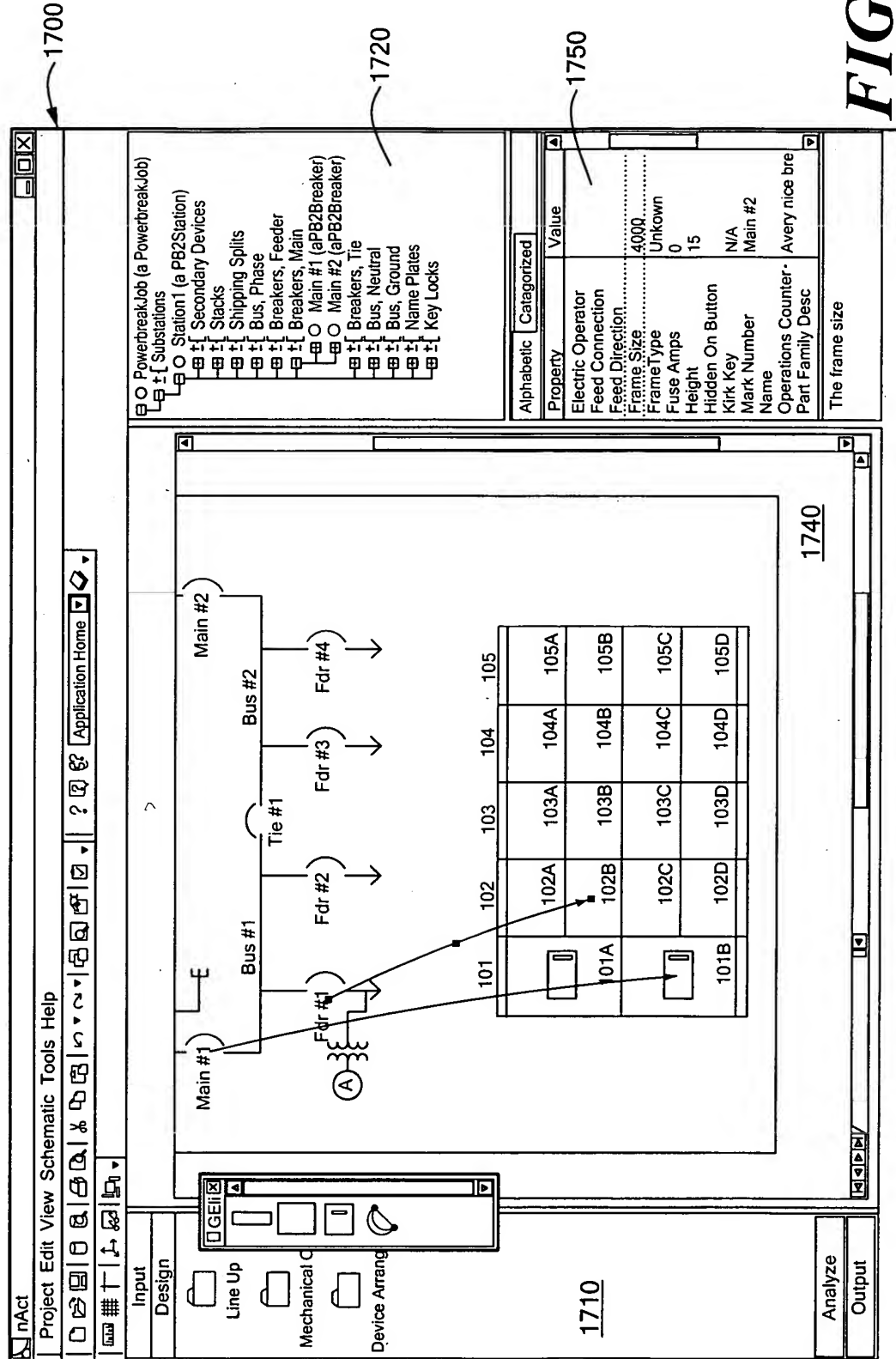


FIG. 17



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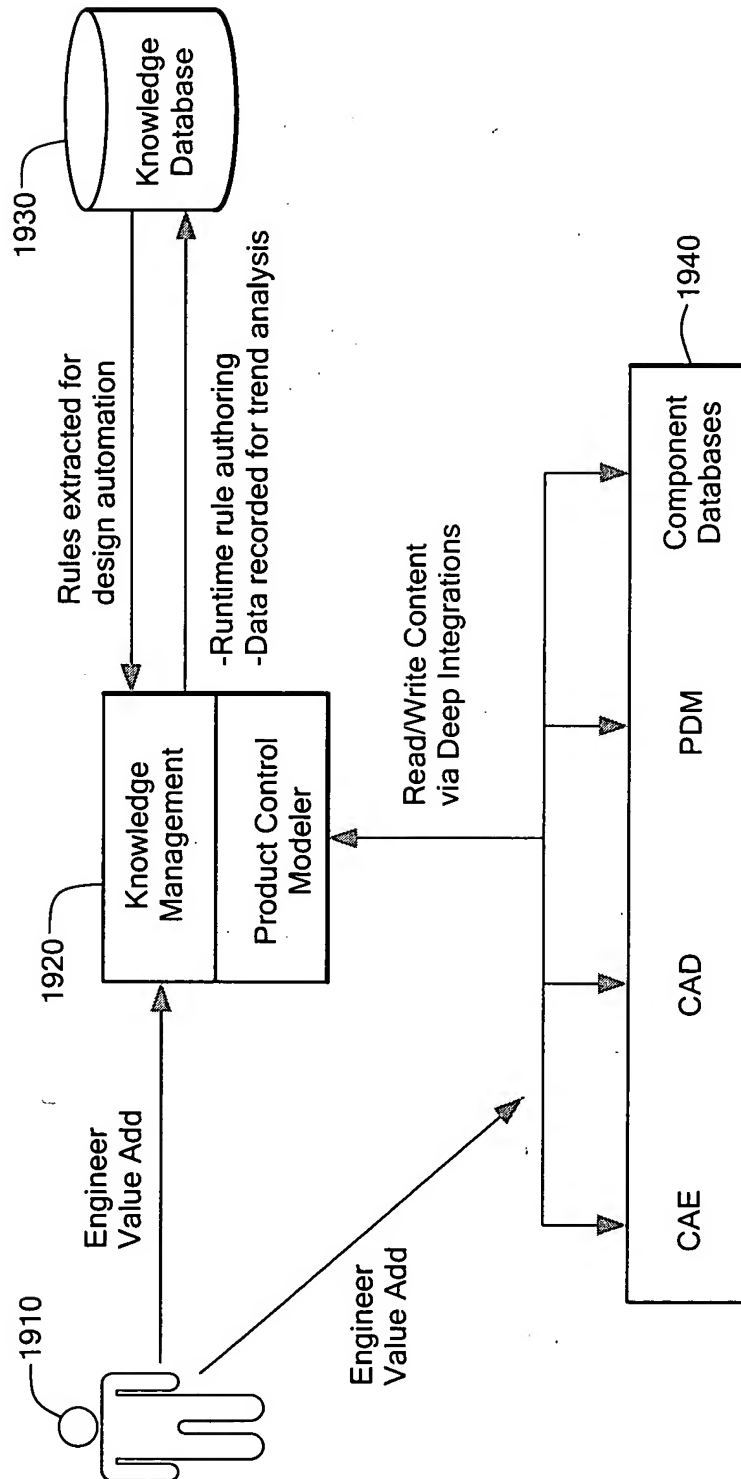


FIG. 19

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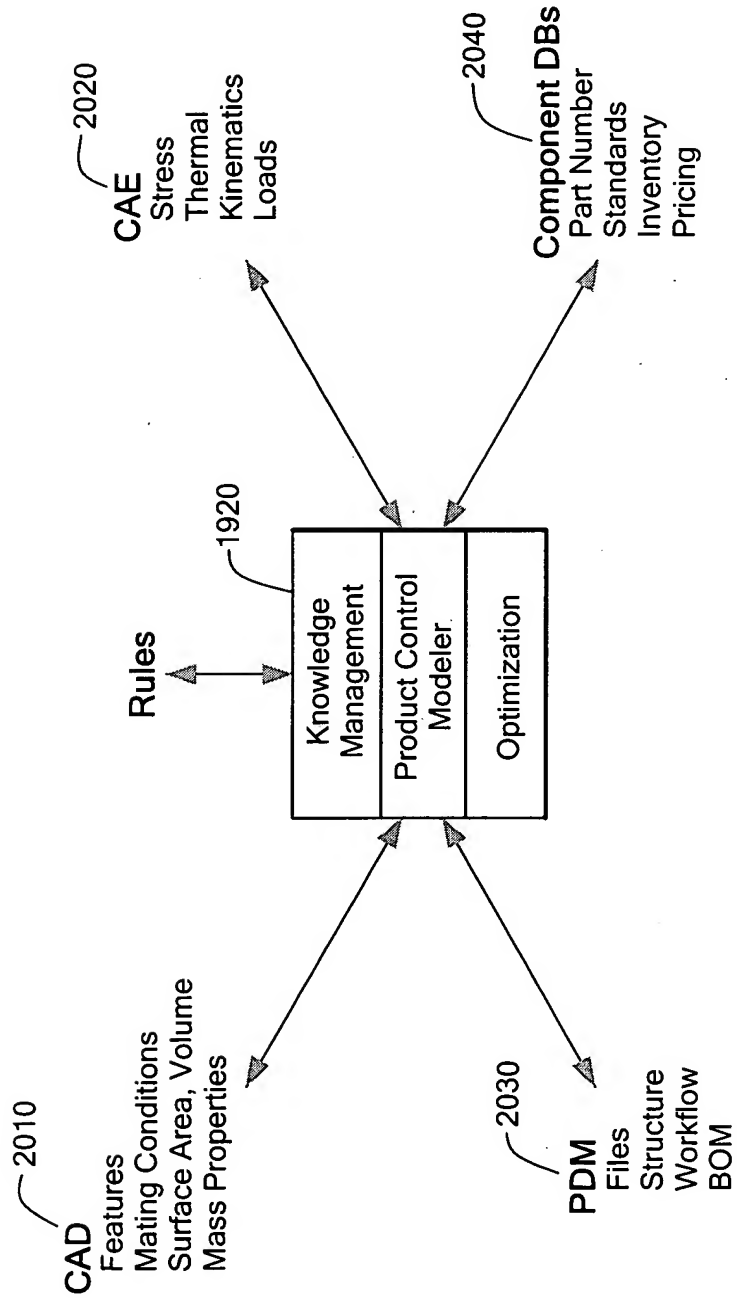


FIG. 20

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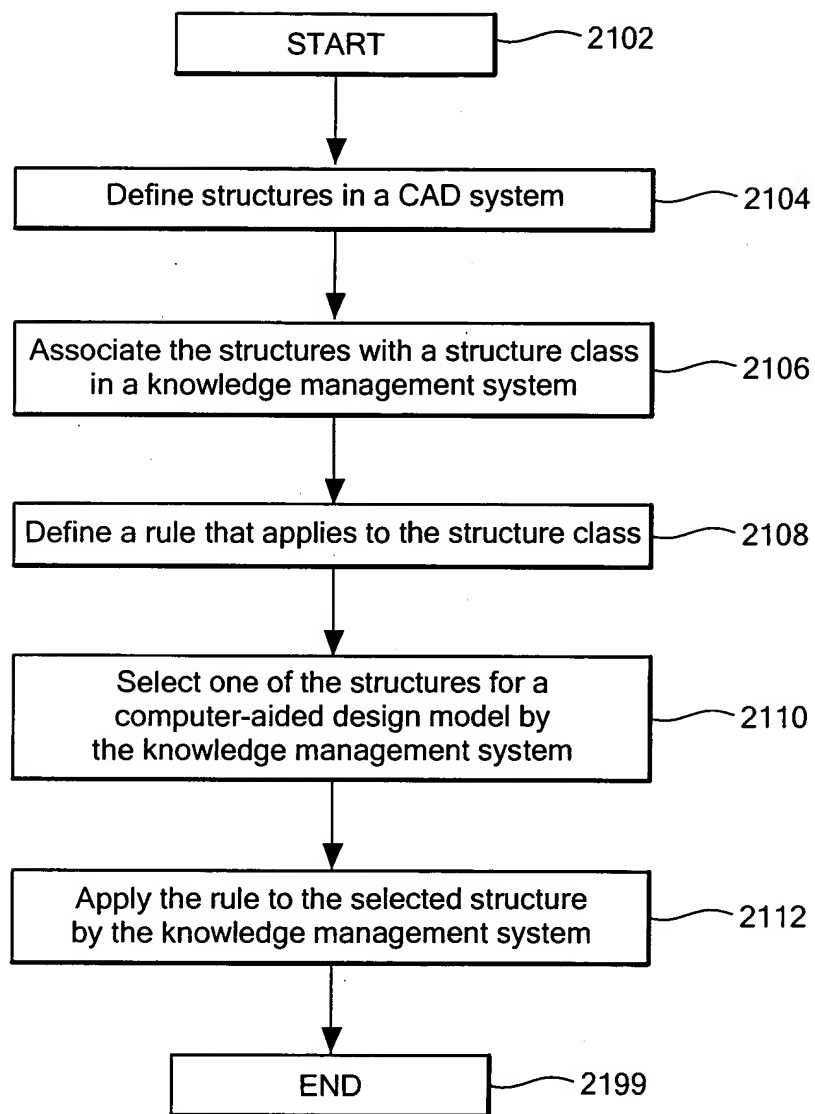
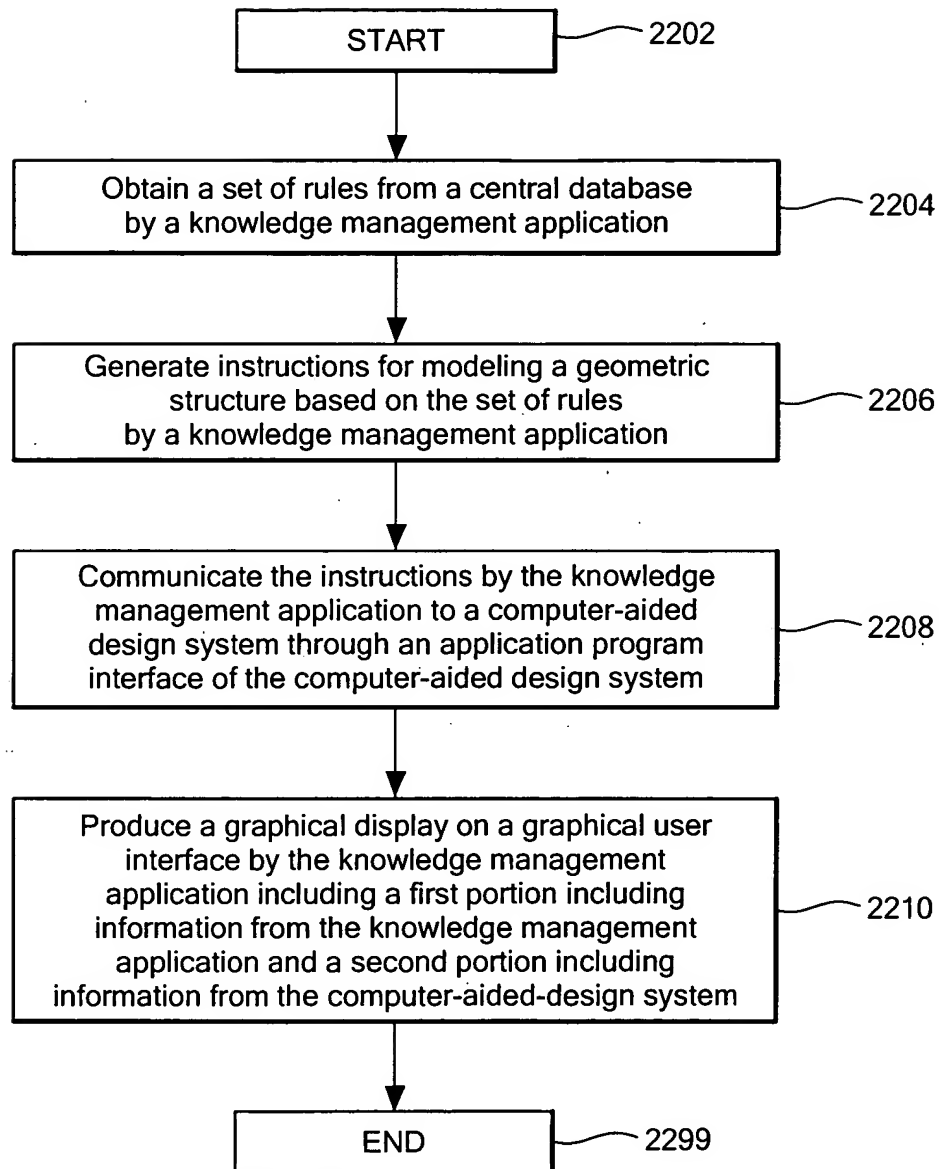


FIG. 21

2100

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2200

FIG. 22